High-Mu Twin Triode

9-PIN MINIATURE TYPE

For High-Fidelity Audio-Amplifier Applications Critical as to Noise and Hum

GENERAL DATA

Electrical:

Heater, for Unipotential Cathodes:		
Voltage (AC or DC)	6.3 ± 10%	volts
Current at 6.3 volts	0.3	amp
Direct Interelectrode Capacitances (Each Unit, Approx.):▲		
Grid to plate	1.5	μμf
Grid to cathode and heater	1.6	μμf
Plate to cathode and heater	0.2	μμf

Equivalent Noise and Hum Voltage (Referenced to Grid, Each Unit):

Average Value (RMS)	1.8	μvolts

Measured in "true rms" units under the following conditions: Heater volts (AC) = 6.3; center-tap of heater transformer connected to ground; plate supply volts (DC) = 250; plate load resistor (megohms) = 0.1; cathode resistor (ohms) = 2700; cathode bypass capacitor (μf) = 100; grid resistor (ohms) = 0; amplifier frequency range 25 to 10000 cps.

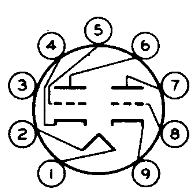
Characteristics, Class A_1 Amplifier (Each Unit):

Plate Voltage	100	250	volts
Grid Voltage	-1	-2	volts
Amplification Factor	100	100	
Plate Resistance (Approx.)	80000	62500	ohms
Transconductance	1250	1600	μmhos
Plate Current	0.5	1.2	ma

Mechanical:

Operating Position	Any
Maximum Overall Length	2-3/16"
Maximum Seated Length	1-15/16"
Length, Base Seat to Bulb Top (Excluding tip)	1-9/16" ± 3/32"
Diameter	0.750" to 0.875"
Dimensional Outline	See *General Section*
Bulb	T6-1/2
Base	Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW	9LS

Pin 1 - Heater
Pin 2 - Heater
Pin 3 - No Connection
Pin 4 - Cathode of Unit No.2
Pin 5 - Grid of Unit No.2



Pin 6 - Plate of Unit No.2
Pin 7 - Plate of Unit No.1
Pin 8 - Grid of Unit No.1
Pin 9 - Cathode of Unit No.1

AMPLIFIER — Class A_1

Values are for Each Unit

Maximum Ratings, *Design-Maximum Values:*

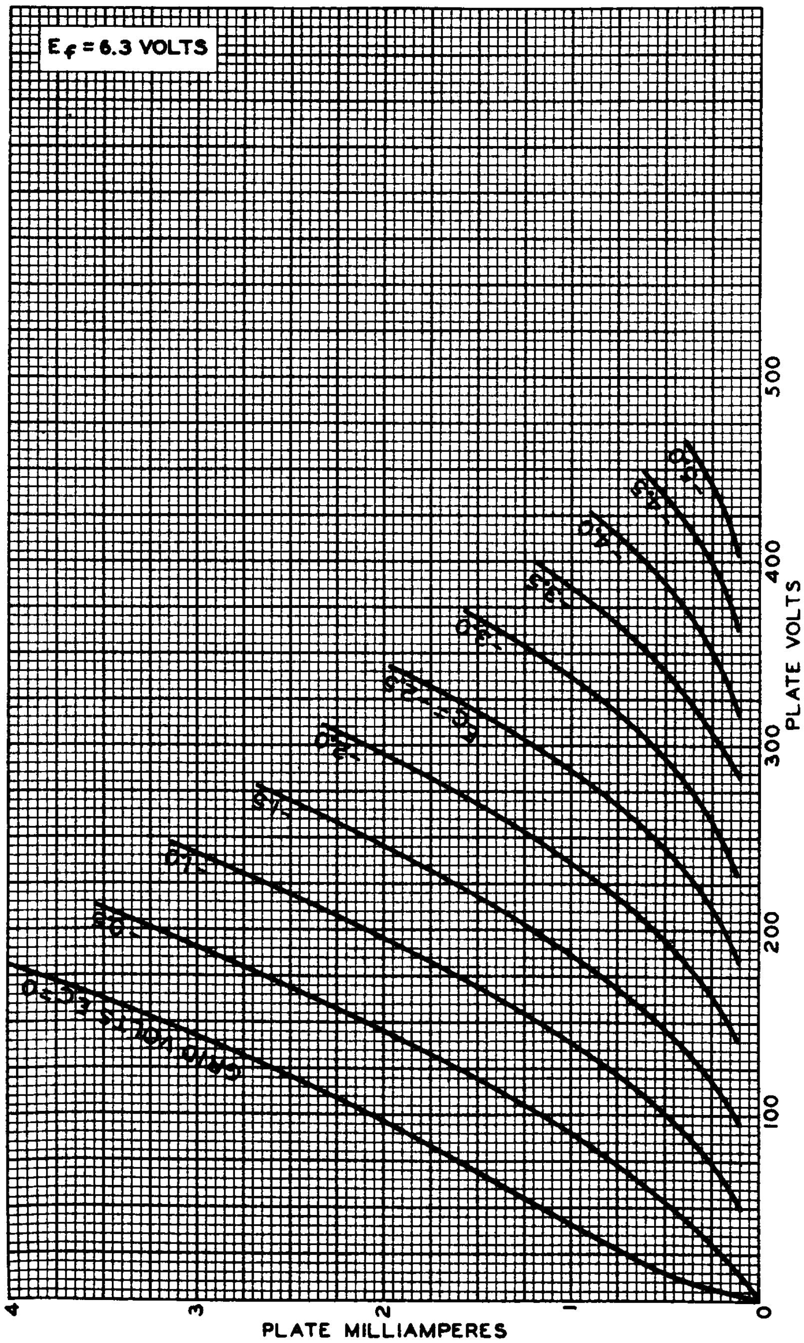
PLATE VOLTAGE	330	max.	volts
GRID VOLTAGE:			
Negative-bias value	55	max.	volts
Positive-bias value	0	max.	volts
PLATE DISSIPATION	1.2	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200▲	max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED-AMPLIFIER CHART No.25 at front of this Section

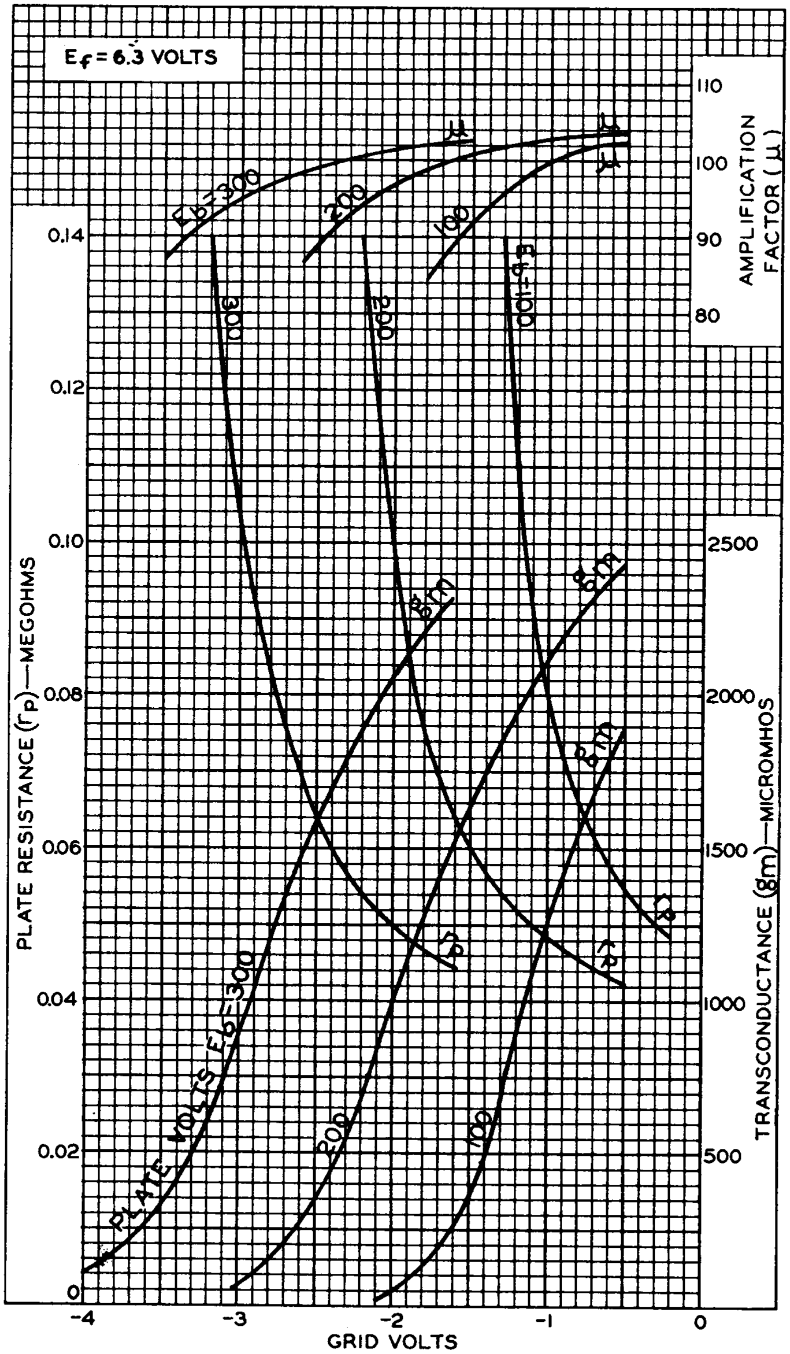
▲ The dc component must not exceed 100 volts.

AVERAGE PLATE CHARACTERISTICS
Each Unit



92CM-10470

AVERAGE CHARACTERISTICS
Each Unit



92CM-10471